Cycle of the Recycle:
Secondhand Clothing Donations Abroad and the Role of the Nonprofit

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I.   Introduction

People donate clothing for a variety of reasons, ranging from changing fashions, the outgrowing of favorite t-shirts, to helping others less fortunate than themselves. The public generally considers donating used clothing to local non-profits as a better alternative to throwing them away, which increases landfill waste. Donating to a local non-profit can also be categorized as an altruistic action or an action that gives donors a feeling of "warm glow", which essentially is "an additional source of donor utility, that being from the act of giving" (Yetman and Yetman 2009, 6). The public often fails to consider the consequences of their donations once they have been dropped off at local non-profit agencies.

The clothing literally travels the world and has an economic ripple effect that far exceeds consumers' expectations or their intent. There are several markets where donated clothing can end up. One example is Africa, where clothing is imported and sold in local markets. Another differencing market is India who imports unusable clothing to be used as input fibers. In this paper I will determine if one market has more negative externalities than another and whether the nonprofit takes these externalities into consideration when allocating donations.

In 2011, the United States exported approximately 33,000 million dollars worth of goods to Africa, with used apparel composing roughly 60 % of the exports (United Census Bureau 2011). In turn the United States imported 93,000 billion dollars worth of goods from Africa. This exchange is by no means insignificant. There has been a negative stigma associated with used clothing donations to third world countries, as they reportedly destroy local textile producers, especially in Africa. If this is the case, then non-profits - whose mission statements may be summarized as doing something good - are perhaps not taking their clientele's best interests into consideration.

There are many different non-profits that collect used clothing for redistribution[1].

Goodwill Industries is a U.S. non-profit that collects gently used clothing with the primary

purpose of resale through thrift shops. Clothing that is not sold in the thrift stores is sent to a

Goodwill Industries outlet where it is sold by the pound. Clothing that remains unsold is sent to a

salvage warehouse. There, it is compiled into bales; this is where an international used clothing

dealer would purchase their goods from the non-profit organization. In 2011, Goodwill Industries

generated 2.59 billion dollars of revenue from retail sales alone; this money is used to support

their mission, which includes job training, job placement, and family support (Goodwill

Industries 2012).

Goodwill Industries also provides centers in many of the world's impoverished nations,

where they create an environment for people with disabilities and low economic classes to

receive job training and placement. One of their missions in the international platform is to create

a sense of environmental awareness and therefore, create sustainable recycling behavior within

that country. For example Goodwill Industries Brazil has a collection bank for used clothing,

which is then resold in local thrift stores in Brazil. Again, the revenue from these activities is

used to create jobs and training for local Brazilians (Goodwill Industries Global 2012).

World Vision is a Christian non-profit that works to help the "poor and oppressed to

promote human transformation" (World Vision 2012). People primarily give through monetary

donations that are then used to help a child in need by sending water, clothing, medicine, etc.

World Vision claims that $1 donated to their non-profit is worth $1.40 of services: 60 cents sent

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[1] There are also some for-profit firms that donate clothing to underdeveloped countries. For example TOMS Shoe's mission states that for every pair of shoes bought a pair of shoes sent abroad.

directly to the program of choice and 80 cents towards administrative costs and helping distribute goods.

These are just several examples of non-profits whose goal is to combat poverty. One way that they realize this goal is by collecting used textiles, which are sold, sent abroad and distributed to the local population in underdeveloped countries. Almost all of these non-profits use the same supply chain system. First, individual households donate clothing to a non-profit agency. The non-profit then sells the used clothing to rag dealers. The revenue from these sales is then put towards supporting the non-profit's mission, be it job training or carrying out other international developmental programs.

Rag dealers are generally family owned businesses that have developed close relationships with international wholesale merchants in the developing countries (Hawley 2006). These wholesale merchants buy product by the bale, for a small fraction of the clothing's original retail price. The wholesale merchants provide the bales at warehouses for local merchants to inspect and purchase, where the price is marked up significantly but still relatively cheap, to then sell in local markets (PBS 2001). This supply chain, from the American to Zambian households, has many intermediary steps that create jobs, yet has been criticized for destroying local textile manufacturers and undermining the local culture by imposing Western clothing styles.

Figure 1: <u>Supply Chain Outline</u>
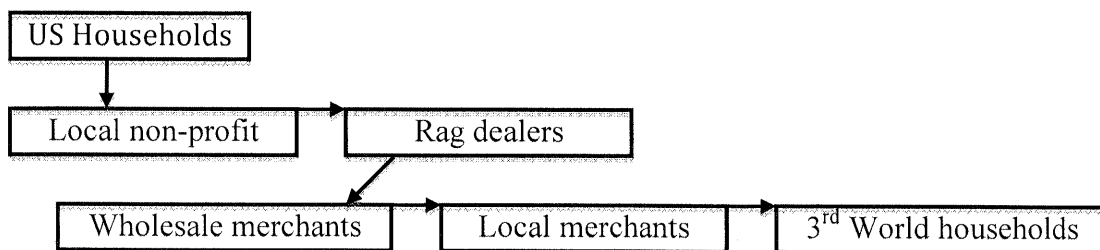
This type of supply chain is typical in countries like Zambia that import used-clothing to resell in local markets. In one Zambian market alone, there can be up to 500 Salaula[2] traders at once, thus showing how much secondhand clothing is integrated into some developing countries' markets. Salaula trading is the easiest form of starting a business in Zambia, and can be successful if the bales prove to be higher quality than competitors (PBS 2001). Although the wholesale merchants only allow for a brief peek at the bale of clothing before it is bought, as long as the merchant can recover the cost of the bale, he will usually consider it a worthwhile investment (PBS 2001).

India offers an alternative to the Zambian model. India imports used clothing as a raw material to create new products made with old fibers. India has banned importing used clothing; instead imports can only be clothing in "mutilated" form (Hansen 2004 6). The "mutilated" clothing is then decomposed into fibers to manufacture other products. The clothing that is shipped from the United States to India is slashed and unwearable. Workers are hired to decompose the fabrics into colors, which are then "spun into recycled yarn" (Hansen 6).

Zambia and India show two different methods of importing used clothing. In this thesis, I will use these two countries to explore the ramifications from secondhand clothing distribution. I will determine if non-profit firms should increase their involvement regarding clothing distribution once the transaction is made between themselves and the rag dealers. One goal is to determine if the non-profit should voice an opinion on how their donations are used considering the nonprofit's mission is to alleviate poverty and better human life conditions.

II.   Literature review

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[2] Salaula is a local term in Zambia for secondhand clothing (Hawley 2005)

Ray Friedman (1980) deconstructs the role of the non-profit firm in foreign aid. He assesses the supply-side constraint of the foreign aid "because of the donors' control over their contributions, local people cannot participate fully in the development process" (29). The non-profit is subject to the donation made by citizens and therefore it has "traditionally consisted of shipping whatever was available at the time... supply, not recipient need" (29) is what controls materials given as foreign aid. This creates a lack of control for the developing countries that have practically no say on what goods they import. He notes, "because the donors rather than the receivers control the use of aid funds it is not known what the receiver of aid would do with those funds if left to freely choose for themselves" (26).

Friedman points out that a benefit from using non-profits is that they provide a site for people to contribute and make donations that would "otherwise have gone untapped" (26). Non-profits usually hire people who have worked overseas, therefore increasing knowledge about local circumstances and non-profits usually have "smaller staffs and lower salaries" (24). Non-profits are "important actors in foreign aid because of the large size of Americans' contributions to developments aid- resulting partly from U.S. tax incentives" (24). These benefits create an environment that gives incentives to create "new processes and 'integrate' approaches to aid" (26)[3].

Jana Hawley (2006) assesses the secondhand clothing trade from an environmental standpoint. She reports that on a national level there was about 335 pound per capita per year of textile waste in the United States in 1997. Only 25% of the waste ends up in landfills, while 75% ends up being donated to local nonprofits and then resold, remanufactured, or sold overseas.

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[3] This could be an argument that nonprofits are dynamically efficient

Hawley finds problems resulting from the supply of secondhand clothing to developing countries. Nonprofits sell to rag dealers: a group of for-profit individuals that buy used clothing and then work with overseas merchants who in turn sell the clothing in local markets. These rag dealers "acquire, sort, process, export and market pre- and postconsumer textile products for various markets" (265). They are responsible for the distribution of the textile once it leaves the non-profit organization; every item they do not sell must be taken to the landfill where they are charged by the pound for dumping (272). This business is one that is heavily reliant on bonds and relationships between individuals and it is a profession difficult to enter as the relationships take time and trust to form (265). This presents a problem as the "younger generations have opted for careers different from their parents" (266). Since these relationships take years to form, many of the textile recycling companies have shut down.

Hawley compares several different ways that recycled clothing is redistributed. India, a country that has banned the import of wearable clothing from the United States, accepts only clothing that has been "sent through a machine that slashes the garment beyond wearable condition, yet keeping it in one piece so that it can be more easily baled and shipped to India" (271). It is then used in India solely as an input raw material. India is only one example of a market to which secondhand clothing is exported, but Hawley concludes that it is "the most viable category for growth" (274) by providing employment, helping charity, reducing landfill waste, and distributing clothing to where demand is greatest.

Lucy Norris (2005) assesses to the negative effects of the black markets that arises in India due to the import of secondhand clothing. "Many importers claimed the highest profit to be obtained from imported used textiles is from buying clothing…and selling it on as garments" (91). The citizens are willing to buy from the black market because they simply cannot afford

locally produced textiles[4]. The legal importation of used clothing is in the mutilated form, which is also in high demand in India because of "a lack of indigenous raw material and an inability to purchase new wool internationally at affordable prices" (93).

India's objective is importing textiles to be used as fibers that create jobs by providing a cheap raw material alternative to locally produced fibers. Women are usually hired, who would not be hired otherwise, to cut up the clothing, dissect and weave it into cloth form (96). Norris finds that the goods produced in these factories vary widely on quality. Many of the factories use old, antediluvian machines that produce mediocre goods, but they appeal to a large portion of the population. Some factories use newer machinery and can produce higher quality goods. This creates a large range of clothing that results from used clothing imports; some of the clothing made from used textiles is even sold back to the United States (98). Wealthier citizens are usually unaware that they are purchasing a used good and would be shocked to find out. Norris notes that the "middle classes [in India] profess it to be unthinkable to purchase secondhand cloth openly in the market" (99).

Norris notes that there is a higher profit margin, especially to factories with outdated machinery, when the clothing that is bought has more desirable colors (94). Therefore, clothing from the United States and the United Kingdom is highly desirable, as those countries are more likely to have brighter colors in the bales[5].

Sally Baden and Catherine Barber (2005) conclude that even in the absence of secondhand clothing imports, developing countries' domestic textile production would not be

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[4] This means that there is a high demand for black market goods.

[5] Since the clothing is bought blindly from rag dealers to Indian factories, the reputation of the rag dealer is extremely important. The rag dealer is therefore also dependent on non-profit organizations as they are the first to sort through the donated clothing. Rag dealers are more likely to get a higher price for their product if they have proved to provide a higher quality and better colored good in the past.

resilient in increasing the number of local textile producing companies. They identify several challenges that hinder the local textile producers. For one, local producers are subject to high input costs, such as the cost of energy to run factories, the "cost and availability of raw materials" (16) and the high costs associated with lag regulations (16). These lag regulations, such as "bureaucratic customs clearance procedures" failing to be executed in a timely manner, lead to delay in shipment and failure to provide, which results in an increase in production costs. Occasionally this failure to provide leads to the loss of patron contracts.

Additionally, Baden and Barber conclude that the market for clothing in African countries has been largely overshadowed by competition from "increased imports of new clothing from Asia" (17). Furthermore, because of Africa's relaxed and under regulated customs enforcement, many "new clothing is sometimes passed off as [secondhand clothing] at customs, causing a substantial under-declaration of the value of the containers, and consequent underpaying of tariff duties" (17). Consequently new imports are priced lower in the African markets "increasing competition for the local producers" (17).

Baden and Barber deduce further that the locally producing firms do not provide goods that are in high demand in these African countries. Tastes and preferences seem to be changing in Africa as the idea of Westernized clothing becomes more and more desirable (25). Acquiring this style also denotes a higher status to citizens, therefore increasing demand for secondhand goods even more.

Andrew Books and David Simon (2012) delve deeper into the issues that arise with secondhand clothing imports. Many African textile producers have "moved out of the local market in [favor] of exports and clothing factories operating under the export processing authorities for the U.S. retail market" (16). The African Growth and Opportunities Act, which

has duty-free and quota-free terms on African exports of apparel to the United States creates a

more "affluent export market rather than impoverished local markets" (16). Since African

producers are shifting to the international market place, there is a decline in domestically

produced textiles bound for the African market, while simultaneously an increase in textiles

produced to be sent abroad.

Through their analysis, Books and Simon find situational circumstances that cater to the

convenience of exporting to African countries with relatively low costs. The example used refers

to Europe's imports of cocoa and timber from Africa and how this leads to many unaccounted

for containers piling up in Europe's borders. Since the containers are already on site and there is

"less demand for return trade route" (13) the cost of shipping containers back to Africa drops

significantly[6].

Garth Frazer (2008) takes an econometric approach in his analysis of clothing donations.

He concludes that there exists a negative relationship between the recipient country's textile

production and textile imports: a 1% increase in used clothing imports results in a 0.61%

decrease in apparel production (1774). He does not include data for the changing market to

exporting textiles or the increase in new imports from Asian countries. His study finds that there

has been an average of 9.6% per year decrease in employment in the apparel industry from 1981

to 2000 and a 13% decrease on apparel production (1779-1780). This is not consistent with the

notion that African domestic production is sustained because it has moved to the international

export of textiles marketplace.

III.   Economic Theory

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[6] Decreased transaction costs decrease the overall export cost to the African markets and
therefore increase supply.

There are varying ways in which secondhand clothing can be incorporated into the marketplace. One example is in many African countries, like Zambia, where used clothing is sold by the bale to local merchants and then sold as individual pieces in the marketplace. Another is in countries like India, where secondhand clothing has been banned as an import and thus the clothing is only accepted in unwearable, mutilated form, and it is then turned into fibers to produce other goods. I will look at the economic effects on the recipient country as a result from each method.

The market for clothing in Zambia can be expanded into three categories: locally produced, new Asian imports, and used clothing. All three clothing options are substitutes, but not perfect substitutes, as certain factors create a demand for each product[7]. Demand for used clothing and Asian imports are related and they are likely to be good substitutes. As westernized clothing becomes more and more fashionable, demand for secondhand clothing increases due to changing tastes and preferences.

In Zambia, the locally produced clothing market is in long run equilibrium at $P_1 Q_1$ in figure 2, right panel. This market of clothing is greatly affected when crates of secondhand clothing arrive. For one, a supply in the market for used clothing has now emerged; the increase in supply has now created an equilibrium price and quantity of used clothing at $P_2 Q_1$ [8](see Figure 2 left panel). In the market for locally produced clothing the increase in quantity of secondhand clothing bought due to the low price, decreases demand for locally produced clothing. The new market price and quantity for locally produced goods is $P_2 Q_2$ (Figure 2 right panel).

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[7] There is a niche market for locally produced products, which usually involve producers of local dress for ceremonies and events where local attire is valued.

[8] Lax regulation on import duties makes exporting used clothing "to Zambia [possible] at little to no cost" (Koyi 271).

Figure 2: <u>Lowered prices in used clothing and locally produced clothing</u>
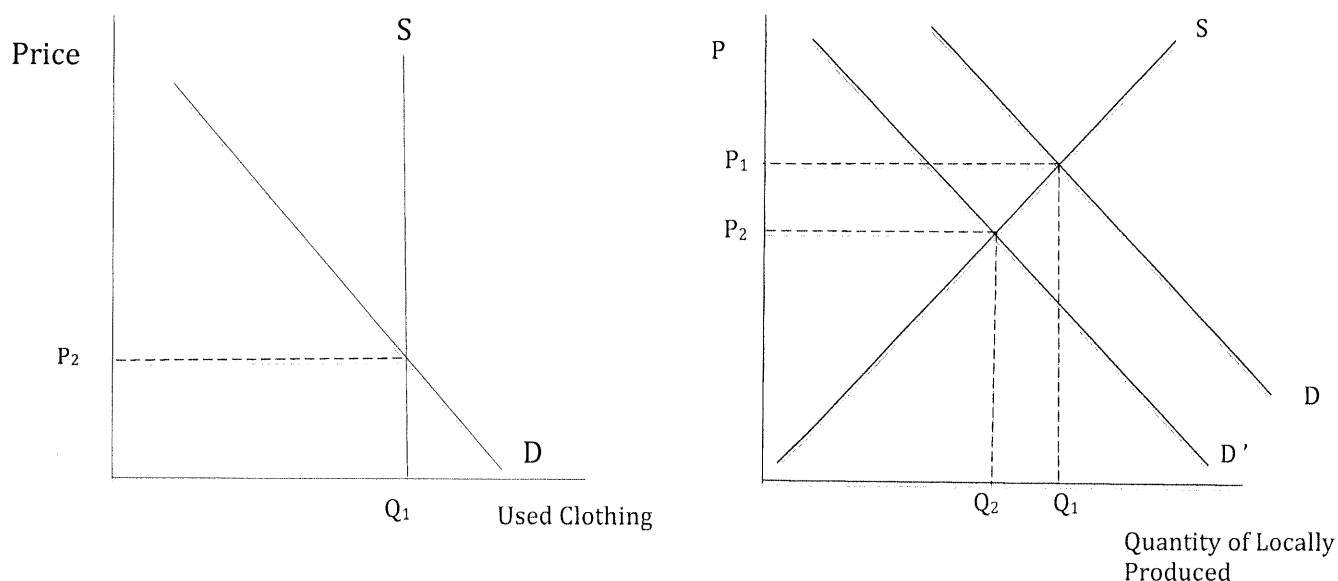
In a competitive market, this lowered price of locally produced clothing makes earning a profit almost impossible for local manufacturers, as the market price is too low to cover average variable and total costs. Furthermore, if the price falls below minimum average totally cost, the firm will go out of business in the long run, which is shown in figure 3. Any price that is below average variable cost will lead the firm to shut down in the short run. Empirical evidence suggests that the decreased price has fallen below minimum average total cost, local firms have continuously exited the market because "most of [the local producers] could not withstand the competition from the foreign firms and ended up closing down or re-locating to the neighboring countries where the production cost were perceived to be low" (Koyi 261).

**Figure 3: <u>Local producers cost curve</u>**
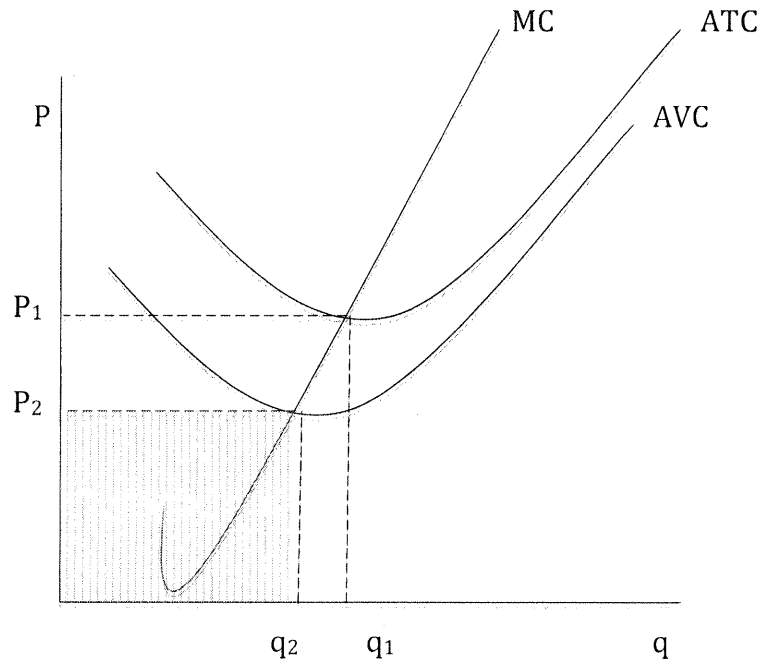
There are other factors that decrease the demand for locally produced textiles. An

increase in cheap Asian imports lowers the price of substitutes even more while increasing the

supply of clothing that can be bought at cheaper prices than Zambian produced textiles. Many

locally producing firms cannot compete with the lowered price from new Asian imports

combined with the lowered price from secondhand clothing, driving many of them out of

business. Therefore the lowered price of clothing and reduced number of local producers in

Zambia is due to the ramifications of Asian imported clothing and imported secondhand

clothing.

A recent concern by Hawley (266) is the decline in used clothing imports due to rag

dealers failing to maintain African contacts. If rag dealers are exiting the market because their

offspring are unwilling to continue in the family business, supply for used clothing decreases and

the price goes up (figure 4 right panel). Supply in figure 4 is dissimilar to supply in figure 3 as it

represents the supply once local producers have exited the market. As the price of used clothing

goes up, demand for locally produced clothing increases because of the increase in the price of a substitute (shown in figure 4 left panel). If suppliers of locally produced clothing have gone out of business, then there will be a shortage of clothing at P_1, represented by the grey square in Figure 4, until the price increases and suppliers increase quantity supplied and consumers decrease quantity demanded.

Figure 4: <u>Decrease in supply of secondhand clothing and the effect on local producers</u>
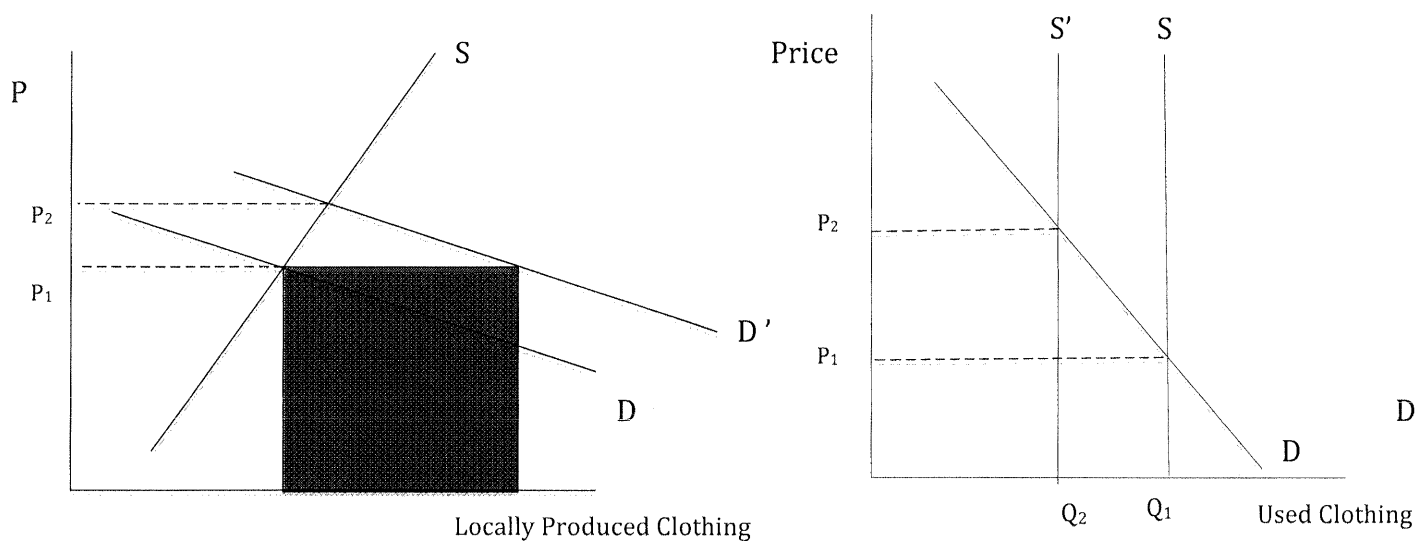

Without the imports from Asia, a decrease in the number of rag dealers would lead to a shortage of clothing causing and increase in the price of clothing, in Zambia. But the increase in supply from Asia counteracts the decrease in supply from American cast offs keeping the price low and local manufactures out of business except for a few that adapt to the changing market place. Local suppliers may be able to increase quantity supplied while simultaneously increasing the market price of their goods to alleviate the shortage. During times of economic hardship, where local textile manufacturers are being crowded out by an increase in new Asian imports

and secondhand clothing imports, many of the locally producing textile workers choose to urbanize and drop their field of trade, further decreasing supply and increasing price[9].

As much of the clothing from America is in sizes too big for the Zambian market or not in matching sets, the increase demand for tailors has kept some local business from shutting down as they are needed to "create blouses and shirts to match 'new' suits, and they turn curtains into dresses socks into bathmats, and skirts into table clothes and table clothes into skirts" (Rivoli 2005 200). This changing market place, while destroying some local jobs, creates other jobs for "traders, importers, sorters, and launderers" (Rivoli 200) as well as jobs for merchants working within the supply chain who sell in the Zambian marketplace.

While Zambia is faced with lowered prices due to increases in supply, India has lowered prices due to decreased input costs. When used clothing is imported to India it is taken as a raw material input and used to create other goods such as clothing, blankets, and mats. Fiber in India is an expensive raw material; Indian manufactures can decrease their costs by using imported used clothing fibers. Figure 5 shows the increase in supply due to a decrease in input costs.

Figure 5: <u>Indian market of fiber made goods when importing secondhand fibers</u>

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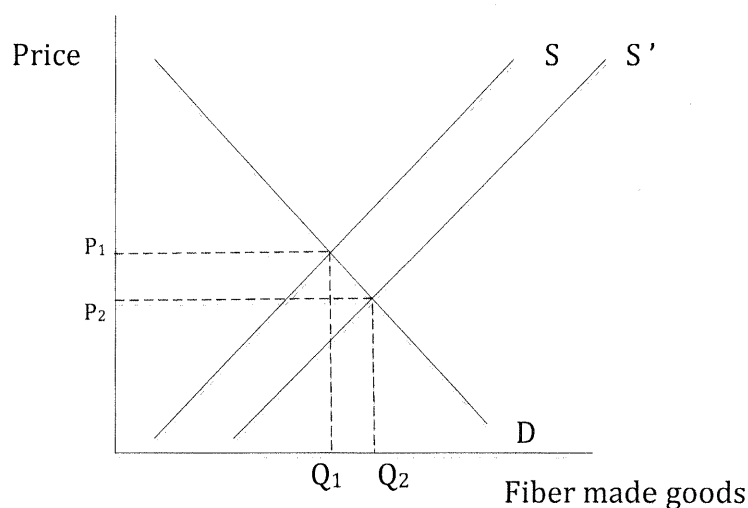
[9] I discuss these ramifications later on.

Unlike Zambia's market, the increase in supply is not due to an increase in competitors

entering the market. The decrease in market price for fiber made goods is due to a decrease in

input prices. For the firm using such goods, the decrease in input prices lowers average total cost

and marginal cost (figure 6). With the decreased input costs, quantity produced by each firm

increases and the market price decreases in the short and long run.

Figure 6: <u>**An Indian manufacturers cost curves**</u>
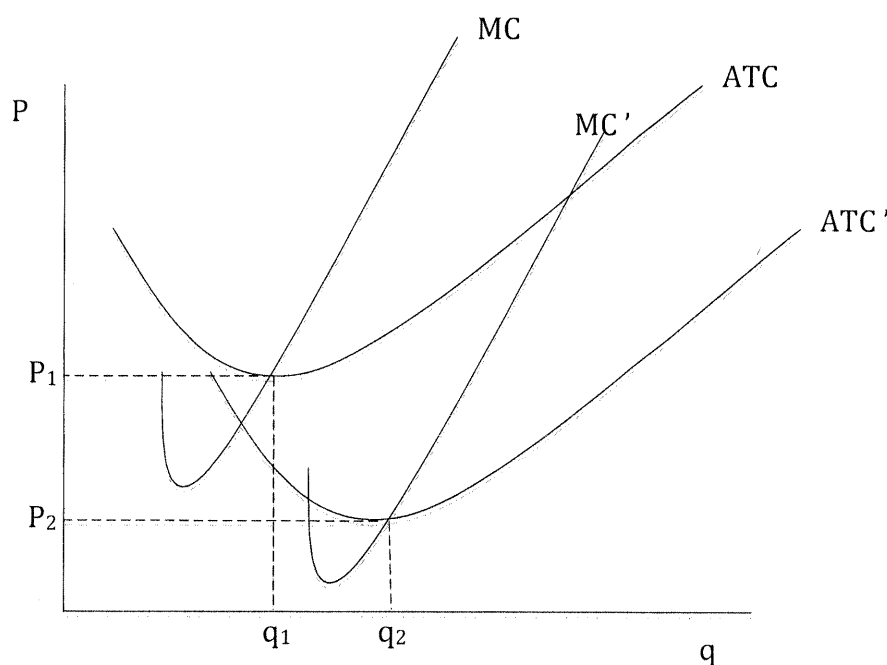
In the long run, the lowered price of P_2 will equal to the firm's new minimum average

total cost curve. The firm will now cater to a market with a lower price for their good, but with a

simultaneous decrease in their own cost of production they are able to adapt to the lowered

market price. Supposing that rag dealers fail to provide used clothing in the future, supply will

shift back to the original supply curve of figure 5, and costs for the firm will increase as they are

no longer subject to cheap input production costs, putting them back on the original average total

cost and marginal cost curves. This will then increase the price to the original P_1, and decrease

quantity to q_1. The Indian experience is similar to the experience of any country that imports a good, for example the United States, which imports a raw material, for example oil, to decrease production costs and provide a final good at a lower price to the public.

IV.   Economic Analysis

In India the market for fiber made goods uses used clothing as an input, and produces goods at a lower cost. Therefore, as the supply increases due to a decrease in input prices, the consumer surplus increases in these markets.

On the other hand, Zambia has several markets, which are affected by the import of second hand clothing, mainly the market for second hand clothing and the market for locally produced clothing. In Figure 7, the overall market for clothing supply shown by "S^L" increases to "S^L+Used clothing" that is, supply of local clothing added to the supply of used clothing. This increase in supply lowers the price to P_2 and local firms will produce Q_L products, while secondhand clothing will make up $Q_2 - Q_L$ quantity supplied.

Figure 7: <u>Consumer surplus with the import of secondhand clothing</u>
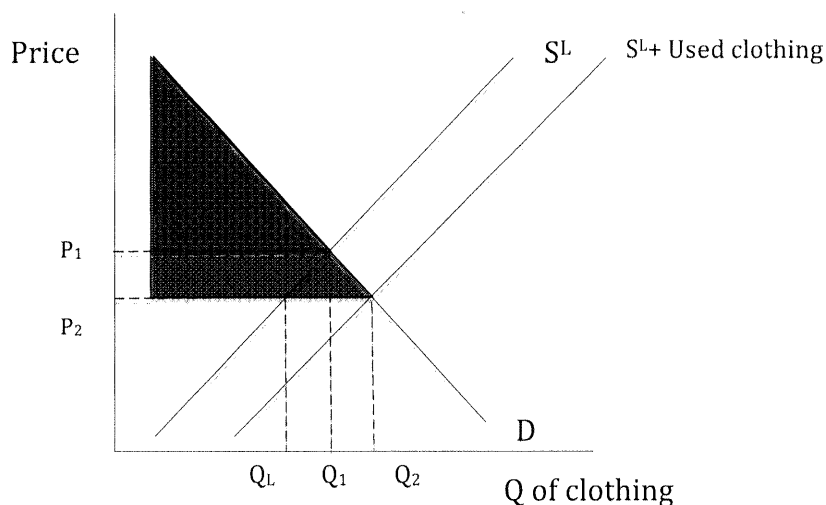
Overall consumer surplus increases as the decreasing price increases from the area under the demand curve out to P_1 to the area under the demand curve out to P_2. Two forces work to increase consumer surplus: 1. The increase in units sold from Q_1 to Q_2 and 2. Q_2 is sold at a lower price P_2 as opposed to P_1. Q_2 is a combination of Q_L, units of locally produced clothing, and $Q_2 - Q_L$ units of secondhand clothing sold[10]. Thus there is a respective change in consumer surplus in the locally produced clothing market and the secondhand clothing market. The market for locally produced clothing is faced with lower consumer surplus from a decrease in price and a decrease in quantity supplied; similarly the secondhand clothing market has an increase in consumer surplus from an increase in quantity demanded and a decrease in price.

The gain in consumer surplus from the used clothing market is more than the loss in consumer surplus from the local textile market if certain conditions hold. The increase in quantity demanded for used clothing must be greater than the loss in quantity supplied that local manufactures incur due to a drop in price and a decrease in quantity supplied. That is, the change in secondhand clothing consumer surplus ($SHC_{consumersurplus}$) due to a change in quantity sold in the market for used clothing (Q_{SHC})[11] times the prices consumers are willing to pay (P_{max}) minus the given market price of clothing (P_{mrk}):

Equation 1:

$$SHC_{consumersurplus} = \frac{1}{2} Q_{SHC} (P_{max} - P_{mrk})$$

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[10] Let me call that quantity Q_{SHC}

[11] In the secondhand mark, the original consumer surplus is 0 because at $P_1 Q_1$ in figure 7 we are assuming no secondhand clothing imports. Once secondhand clothing begins to be imported, an inelastic supply curve emerges at any given moment, as that is the amount of supply rag dealers export given certain factors (profit expectation, donations made to nonprofits, etc). This quantity, times the difference in price consumers are willing to pay and the market price is the new consumer surplus, shown in equation 1.

Is greater than the loss of consumer surplus in the local textile market due to a decrease in quantity supplied by the local producers (Q_L) times the difference between the price consumers are willing to pay (P_{max}) and the market price (P_{mrk}):

Equation 2:

$$Local_{consumersurplus} = \frac{1}{2} Q_L (P_{max} - P_{mrk})$$

Developing countries are also faced with the dilemma should a decrease in supply of secondhand clothing occur. In most cases, it is unlikely that local manufacturers will increase production. As price falls and local manufacturers continue to exit the market, many manufacturers are leaving the market place and choosing to urbanize. This means that in the long run, as the knowledgeable tradesman have moved away from their chosen craft, the cost of production goes up because there has been a loss of the low cost ways of producing textiles. Therefore the cost to enter the textile market will increase as more secondhand clothing donations are imported and more craftsmen leave the marketplace for search of a more profitable industry. If used clothing imports were to decline, the price of local textile would be very high due to the inability to provide garments at the low prices.

The implications of such effect are that although Zambia's local textile producers have moved on, citizens will be faced with higher prices for clothing than when secondhand clothing was easily accessible. As the United States continues to advocate for more sustainable lifestyles, households could limit clothing donations by wearing clothes longer or not buying in such excess, and thus the likelihood of this happening is quite possible. Certain conditions could make the effects less drastic. If supply of secondhand clothing were to slowly diminish then an increase in price would not decrease quantity demanded as greatly as if there was a drastic increase in price from market equilibrium. Slowly some manufacturers may respond to the

increase in price, old cost saving techniques may be acquired and mitigate the shock due to an

increase in price if used clothing continues to decline.

V.   The Role of the Non-Profit Firm

Both India and Zambia import used clothing but in two distinct ways. While Zambia

imports clothing to be sold in the market as a good, India imports used clothing that is sold to

firms to be used as an input. The non-profit is a beginning player who provides the goods to the

for-profit rag dealers or entrepreneurs who then work with international merchants or even

domestic clientele. Organizations like Goodwill Industries and Salvation Army are an outlet

where households can dispose of their unwanted garments. In general, increase in waste leads to

a decrease in happiness, thus citizens are able to get a warm glow feeling when they donate to

nonprofits- assured that the nonprofit will turn their discarded good into humanitarian aid. In

addition, the tax deduction leads to a forgone benefit of not donating clothing if one were to

merely throw away the clothing.

Large nonprofit clothing banks have decreasing economies of scale and can thus manage

the flood of discarded clothing they receive. Rather than being the individual's responsibility,

whose transactions cost are very high to determine the best means to donate their clothing, the

nonprofit is an outlet, at relatively low costs, who is trustworthy to best distribute the clothing.

Clothing can be imported to developing countries at such low prices because the

nonprofit provides the clothing to rag dealers at very low prices, something between .03 to .06

cents a pound (Hawley 266). The nonprofit is able to provide such low prices because they are

given the clothing through donations from American households. Clothing that cannot be sold in

thrift stores the nonprofit is responsible for disposing of. The nonprofit has several options in this

case: sell the very tattered clothing to be made into wipers[12], sell to rag dealers, or be charged by the pound to take it to the landfill (272). Selling the clothing is the best option for the nonprofit as it generates revenue to carry out its mission statement.

Rag dealers are an invaluable link in the supply chain. The nonprofit organization cannot simply donate the clothing to developing countries. For one, they would be ill equipped to manage the bulk of clothing that needs to be distributed (Rivoli 203). If the clothing were to be donated to the public in a developing country, it would be poorly distributed and there would be no way to manage the clothing so that it is not gathered and resold in the market (202). Therefore the small entrepreneurs who provide the link between the American thrift store and the African market are essential.

The American household is the first link that sorts through the clothing and donates it to the nonprofit. The nonprofit then sorts the donated clothing, separating it into what will generate revenue by being sold in thrift stores and what will not sell well. The nonprofit usually receives a larger percentage of women's clothing compared to men's clothing as women are generally more particular regarding the clothing they wear and they wear clothing for less time than a man (Rivoli 191). Therefore more women's clothing is sold in thrift stores and more women's clothing is sold to rag dealers, sometimes "2 to 3 times as much women's clothing as men's" (191). As a result, certain price discrimination occurs in the African market place between men and women's clothes because of the unbalanced ratio between the clothing received by the nonprofit.

Furthermore, African countries are very susceptible to the changing tastes and preferences of the United States. The recipient developing country has little control on the supply

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[12] Many nonprofits sell clothing that is stained or in poor condition to companies that turn the clothing into wipers for cars, households, etc (Hawley 270).

of used clothing that they import; that was decided by the American household, by the nonprofit, and again by the rag dealer.

VI.   Conclusion

In this paper, I looked at the different ways that secondhand clothing can be imported and the distinct ramifications. I discovered that importing secondhand clothing as an input causes a decrease in marginal cost and average total cost and the local firm is able to compete with the lowered market price. Consumer surplus increases due to a price and quantity decrease. When secondhand clothing is imported as a good, the market reacts differently. The increase in supply decreases the market price to an extent that many local produces cannot compete and exit the market. In the event that the supply of secondhand clothing diminishes, some local producers who remained will raise prices drastically. New business will fail to enter the market because of an increase in average total cost makes that market undesirable.

The nonprofit, although one of the beginning and seemingly minor players of the supply chain, greatly influence the economies in developing countries. They provide the good and when their supply decreases the third world countries are directly affected. They also are a large determinant of what sorts of goods are sent abroad and of what variety. The chain continues when the small entrepreneurs who work as for profit entities buy from the nonprofit. This transaction is made with a certain level of trust, knowing that the clothing they have purchased is usable as fiber or is still of wearable quality. In India, the used fibers go on to create many other goods, sold at a lower price to Indian citizens. In Zambia, or any country that imports clothing in a similar fashion, the clothing has passed through many hands, but it continues to provide use to citizens of a country who in its absence may not be able to afford clothes at all.

Works Cited

Baden, Sally, and Catherine Barber. "The Impact of the Secondhand Clothing Trade on Developing Countries." *Oxfam* (2005): n. pag. Print.

"Building a Better World for Children." *Sponsor a Child*. N.p., n.d. Web. 10 Nov. 2012. <http://www.worldvision.org/?lpos=top_drp_HomeButton>.

Brooks, Andrew, and David Simon. "Unraveling the Relationships between Used-Clothing Imports and the Decline of African Clothing Industries." *Development and Change* (2012): 1-26. Print.

"Census Bureau Homepage." *Foreign Trade*. N.p., n.d. Web. 13 Nov. 2012. <http://www.census.gov/>.

Frazer, Garth. "Used-Clothing Donations and Apparel Production in Africa*." *The Economic Journal* 118.532 (2008): 1764-784. Print.

Friedman, Ray. *The Role of Non-Profit Organization in Foreign Aid: A Literature Survey*. Diss. Yale University, 1980. N.p.: n.p., n.d. Web.

"Goodwill Industries Global." Goodwill Industries, n.d. Web. <http://global.goodwill.org/>.

Hawley, J. M. "Digging for Diamonds: A Conceptual Framework for Understanding Reclaimed Textile Products." *Clothing and Textiles Research Journal* 24.3 (2006): 262-75. Print.

Koyi, Grayson. *The Textile and Clothing Industry in Zambi*. Bonn: Friedrich-Ebert-Stiftung, 2006. Print.

Norris, Lucy. "Cloth That Lies: The Secrets of Recycling in India." *Clothing as Material Culture*. Oxford, UK: Berg, 2005. 83-105. Print.

"Our Mission." *Goodwill Industries International*. N.p., n.d. Web. 10 Nov. 2012. <http://www.goodwill.org/about-us/our-mission/>.

Rivoli, Pietra. *The Travels of a T-shirt in the Global Economy : An Economist Examines the Markets, Power and Politic*. Hoboken: Jon Wiley & Sons, 2009. Print.

"T-Shirt Travels." *PBS*. PBS, 2001. Web. 13 Nov. 2012. <http://www.pbs.org/independentlens/tshirttravels/film.html>.

Yetman, Michelle, and Robert Yetman. "Does the Incentive Effect of the Charitable Deduction Vary Across Charities?" (2009): n. pag. Print.